

First Named Inventor: Yaoqi J. Liu

Case No.: 56056US002

Title: Multilayer Infrared Reflecting Film With High and Smooth
Transmission in Visible Wavelength Region and Laminate Articles Made
Therefrom

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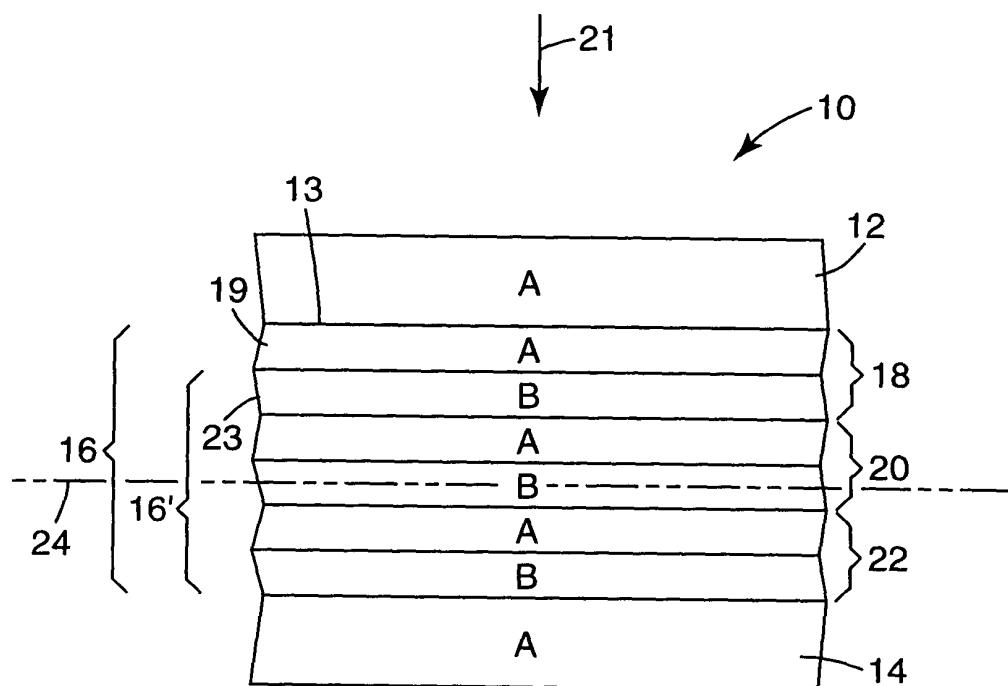


Fig. 1

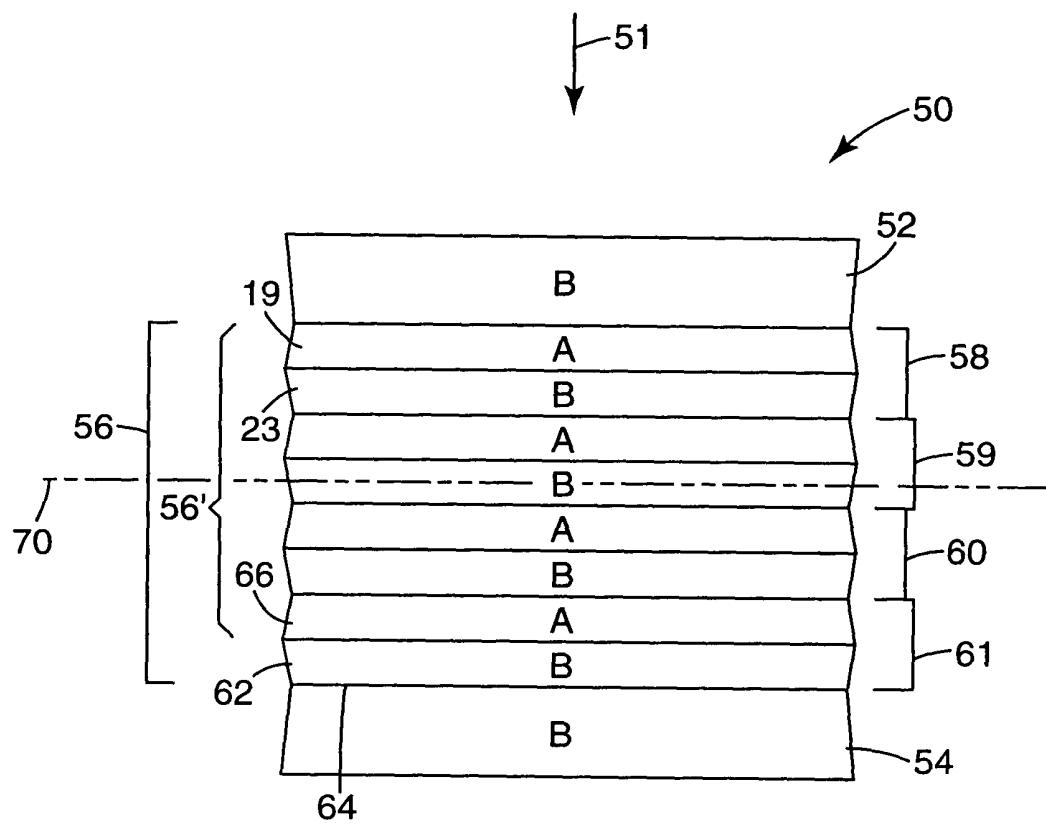


Fig. 2

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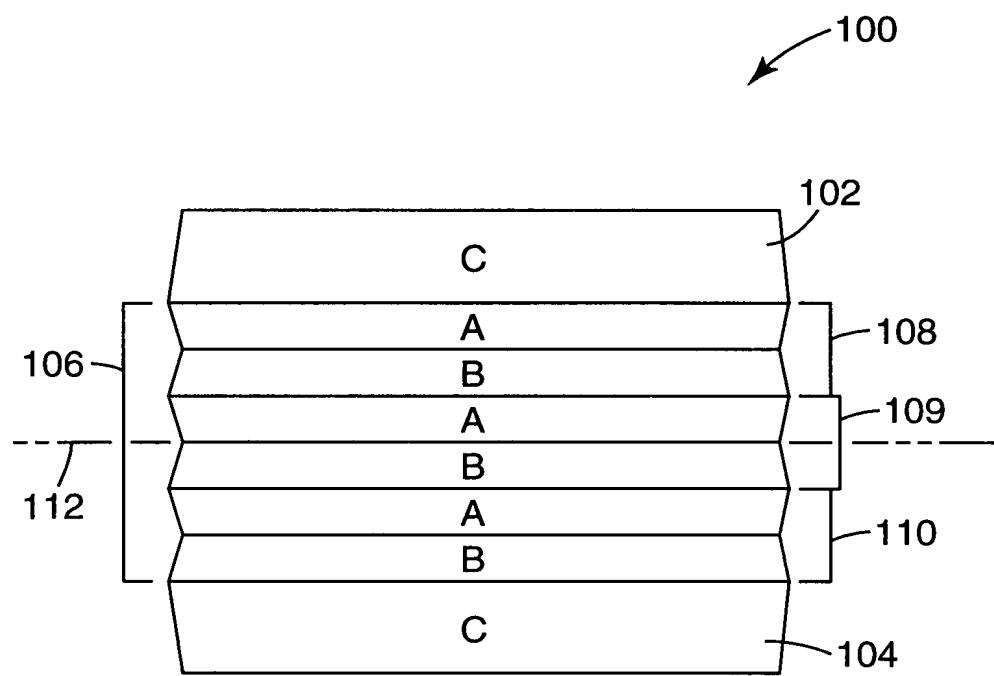


Fig. 3

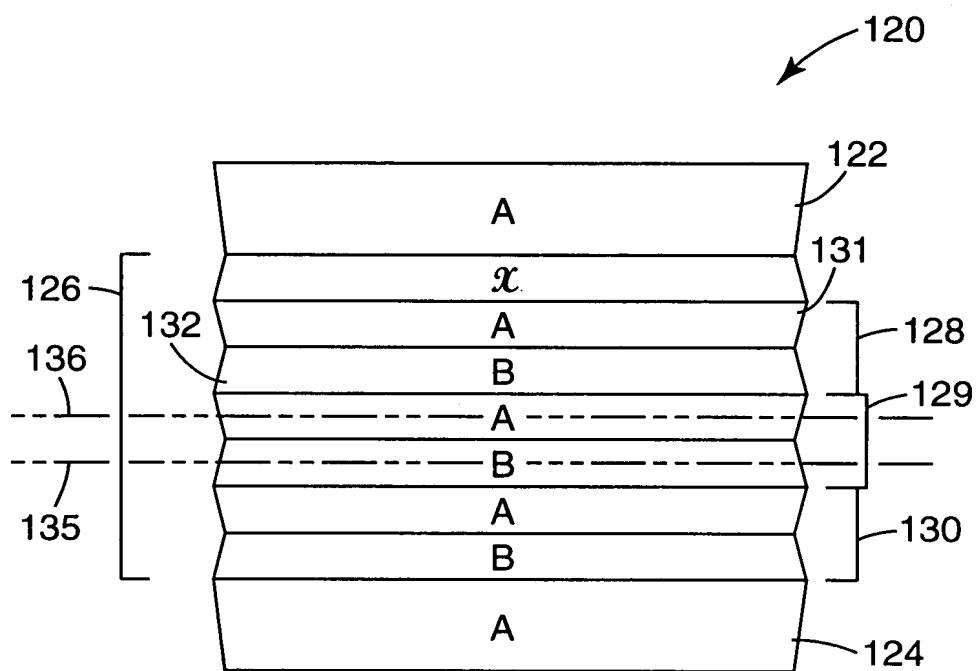


Fig. 4

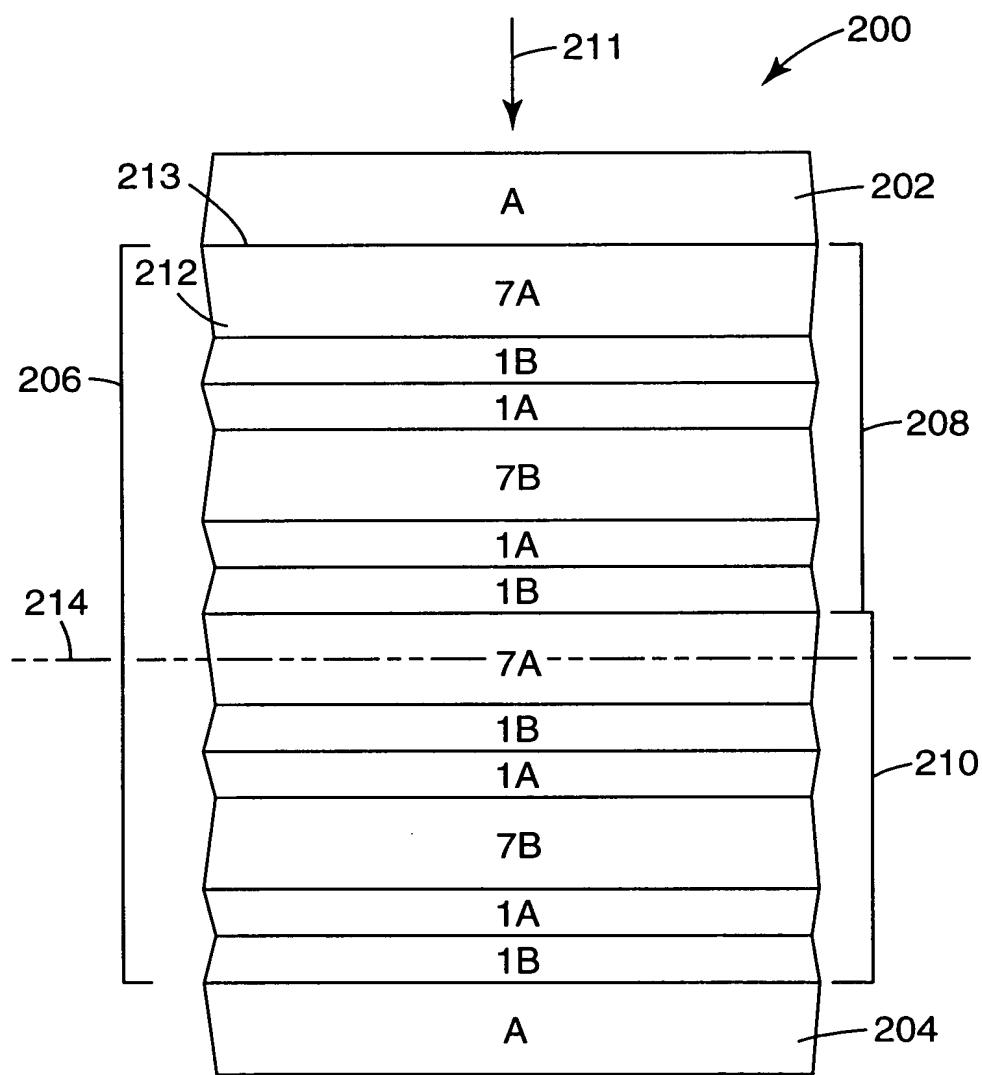


Fig. 5

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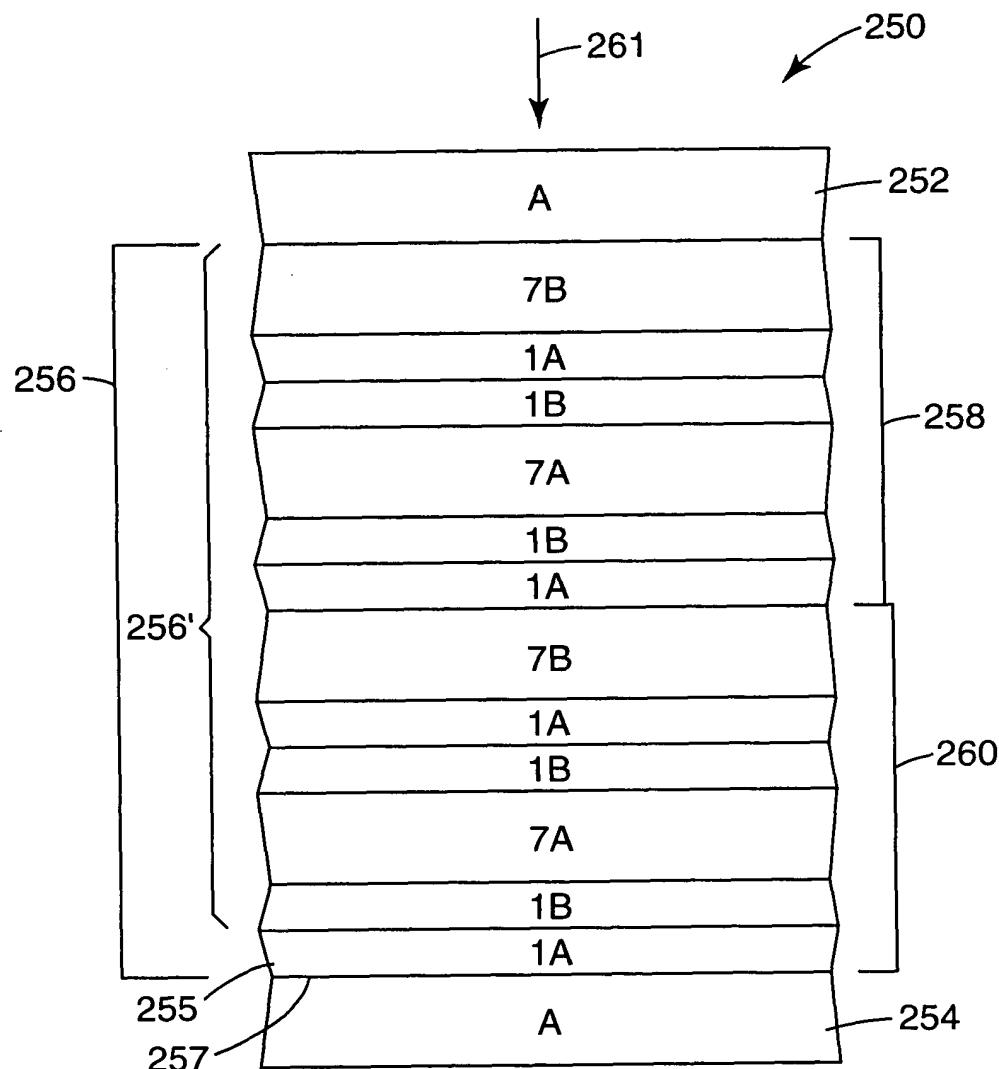


Fig. 6

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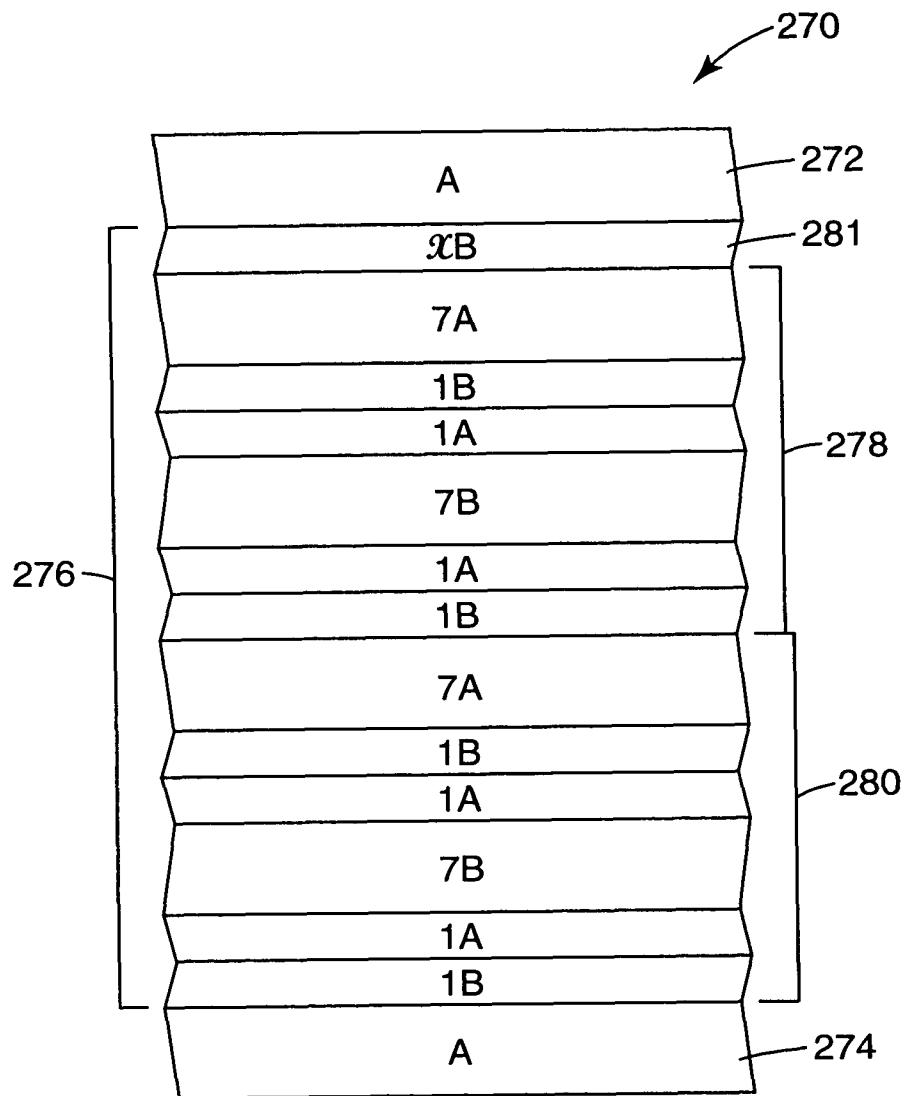


Fig. 7

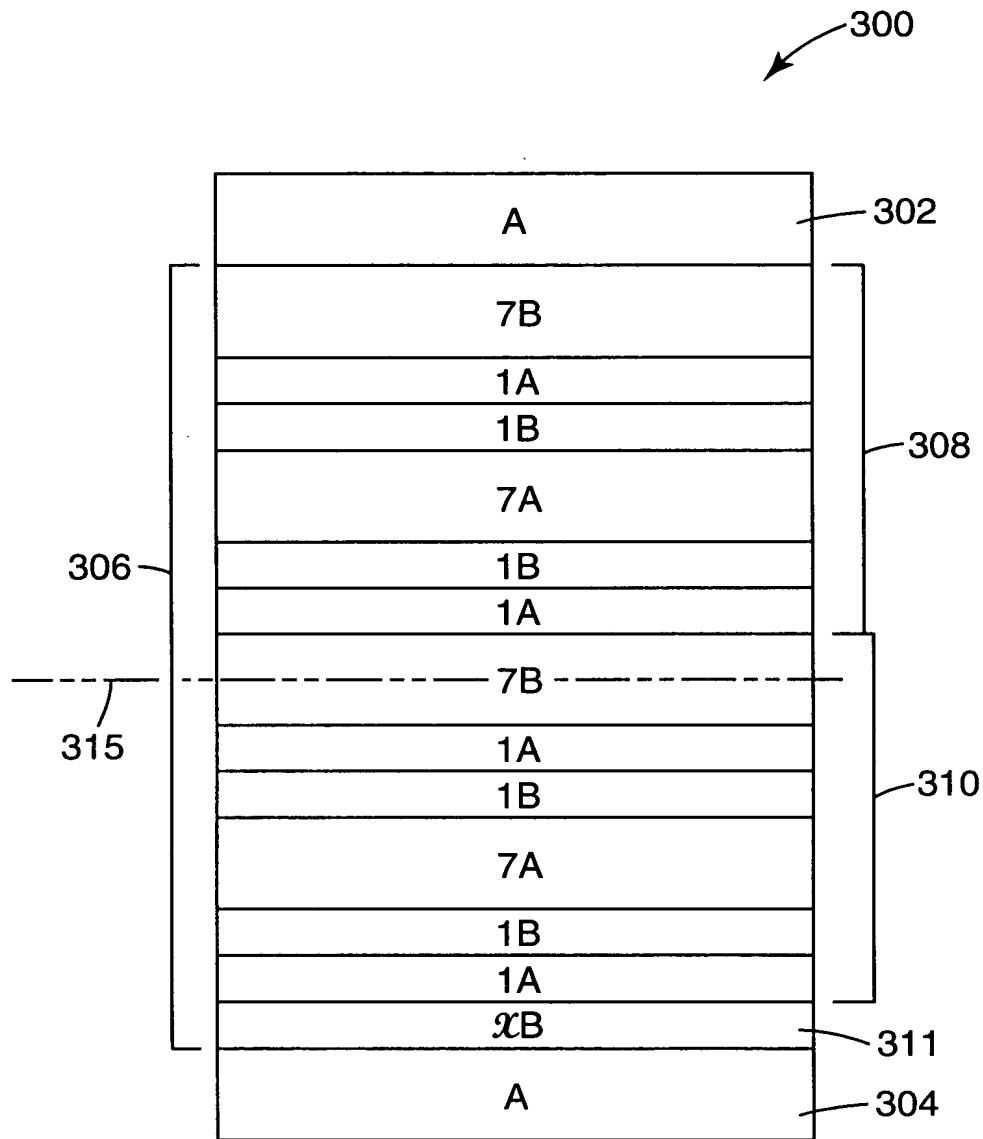


Fig. 8

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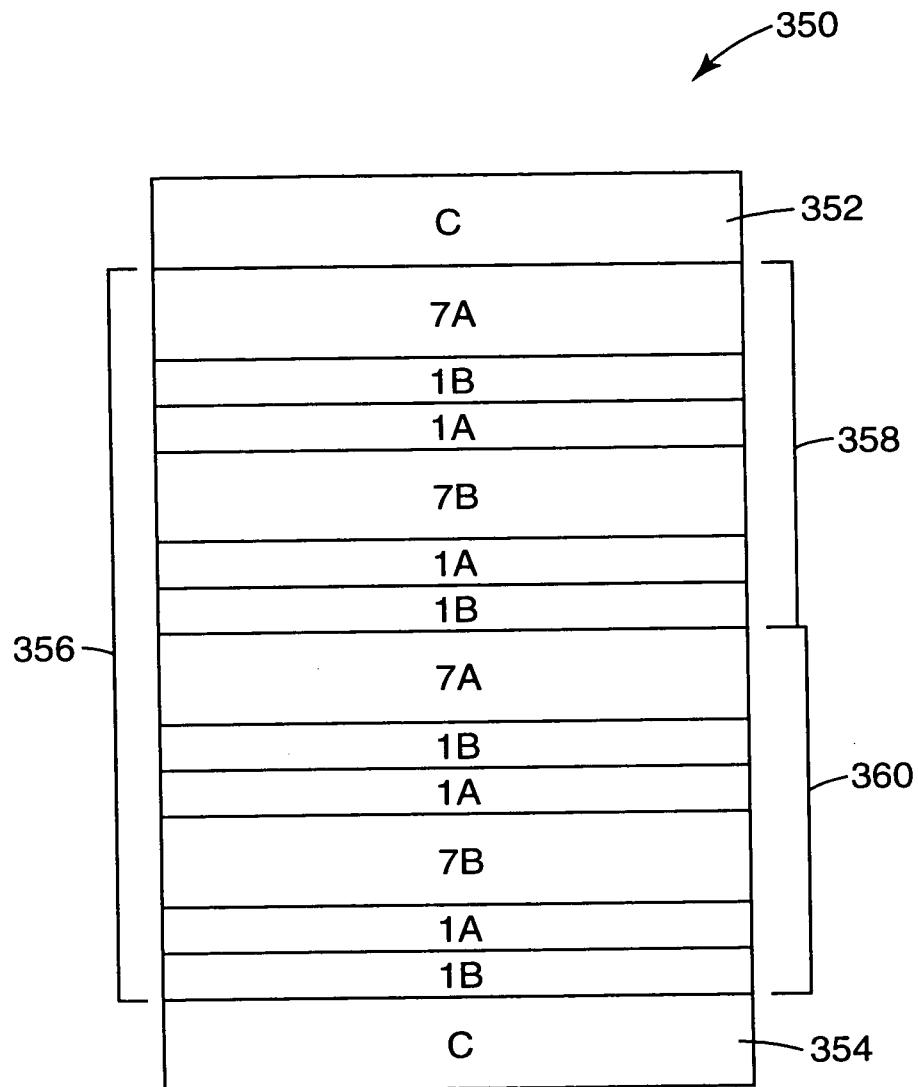


Fig. 9

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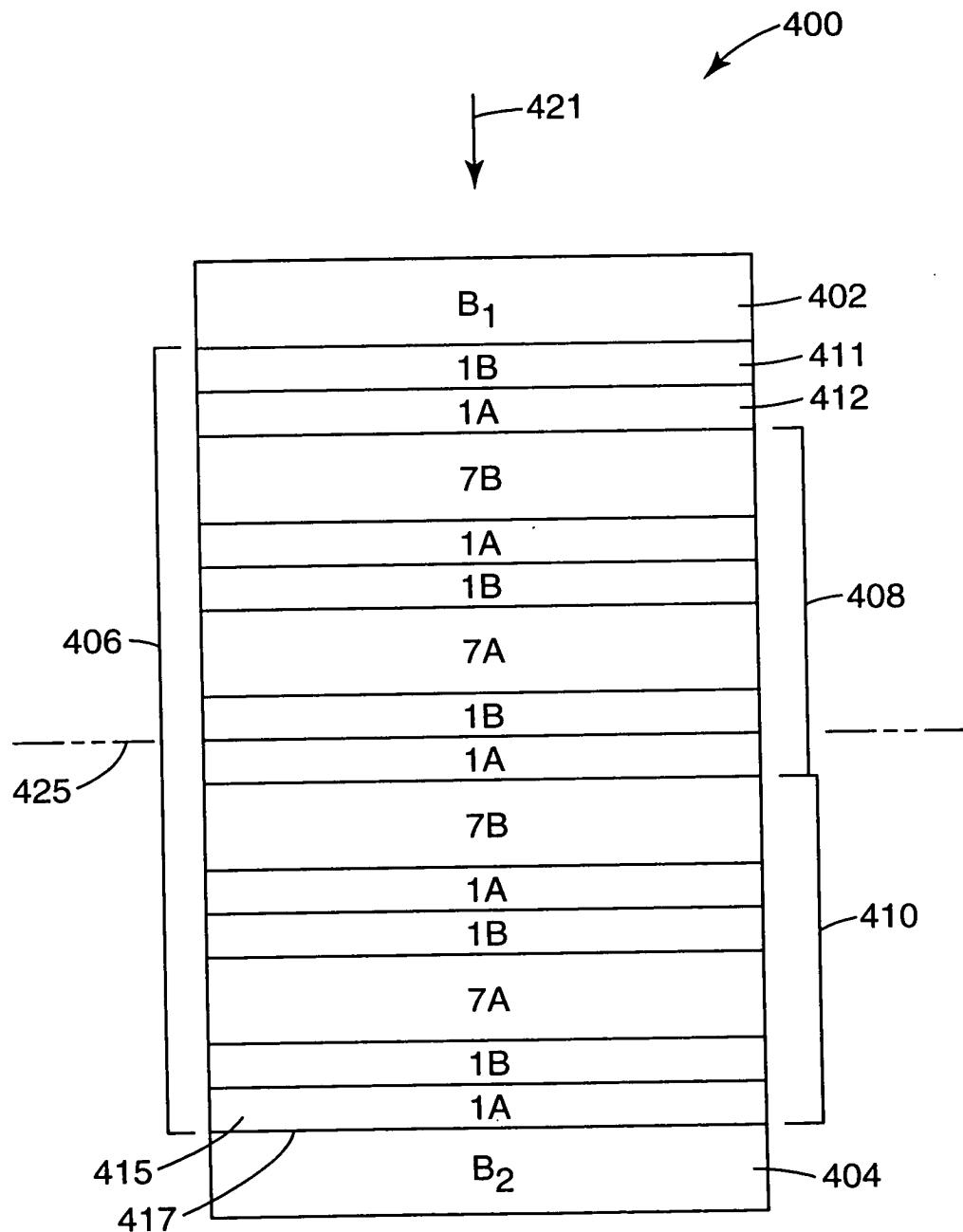


Fig. 10

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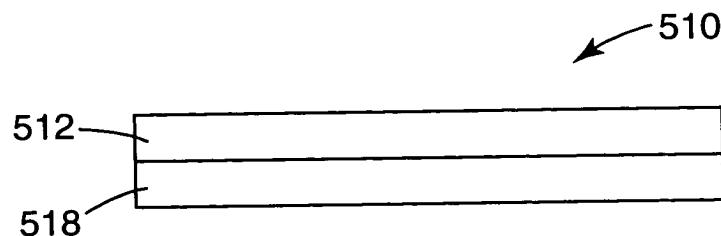


Fig. 11A

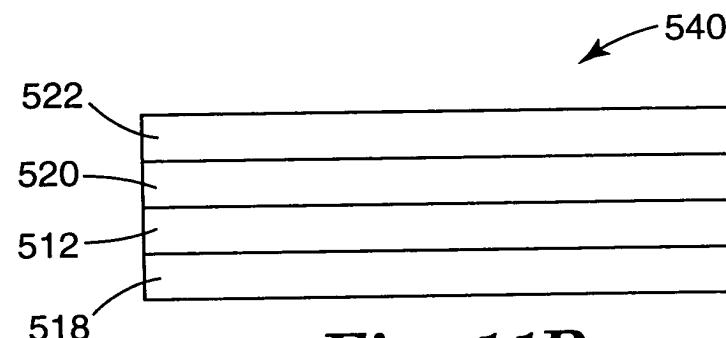


Fig. 11B

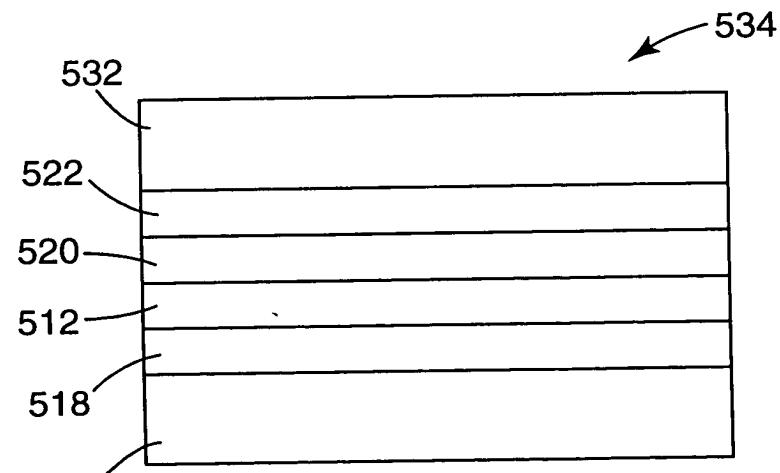


Fig. 12

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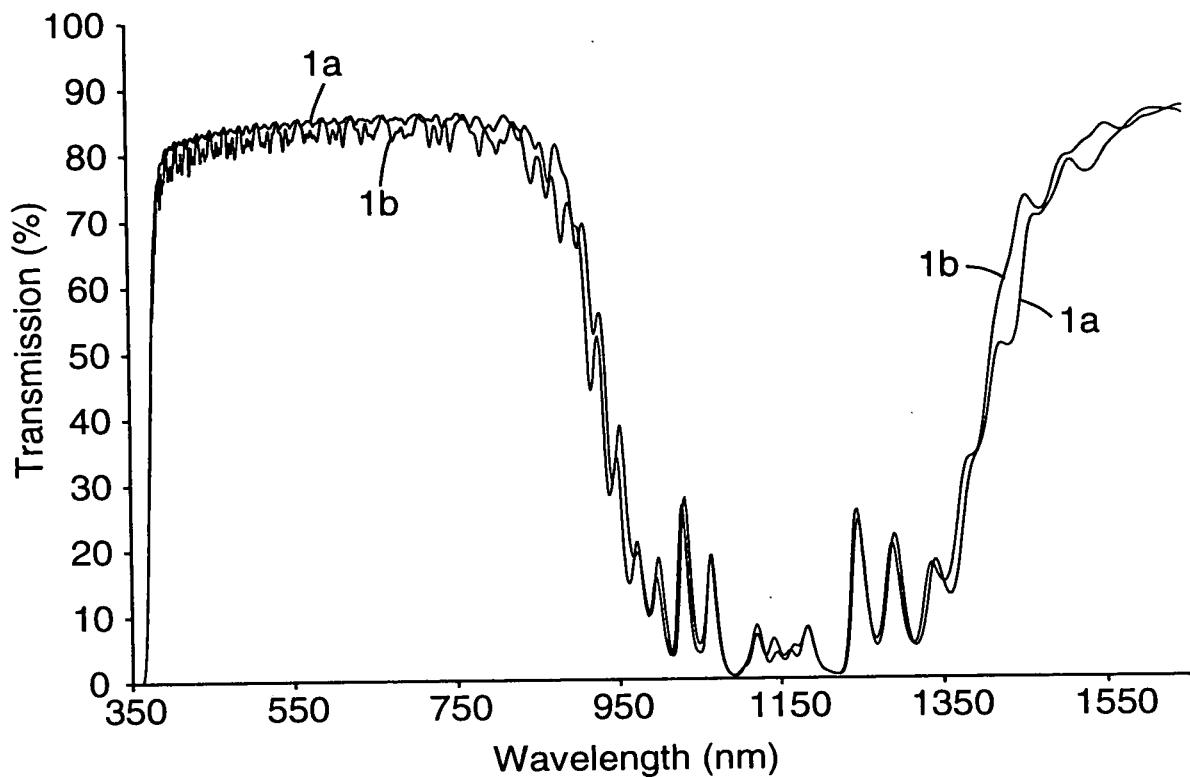


Fig. 13

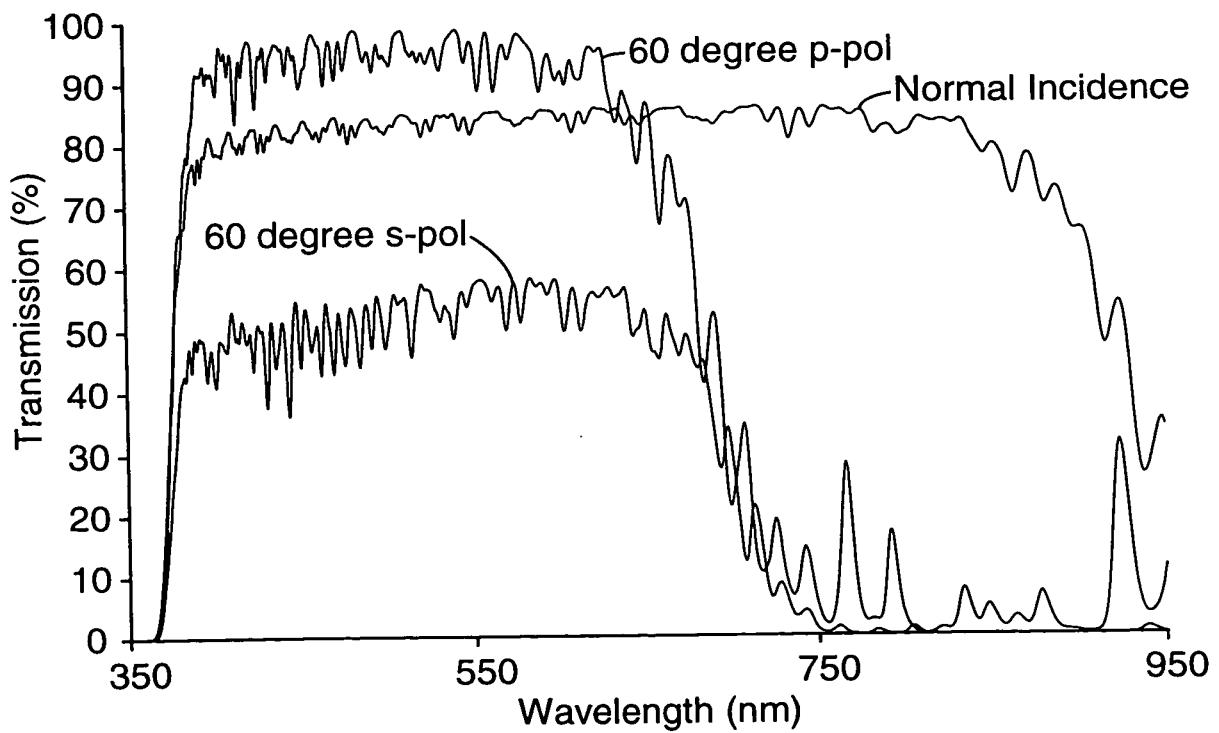


Fig. 14

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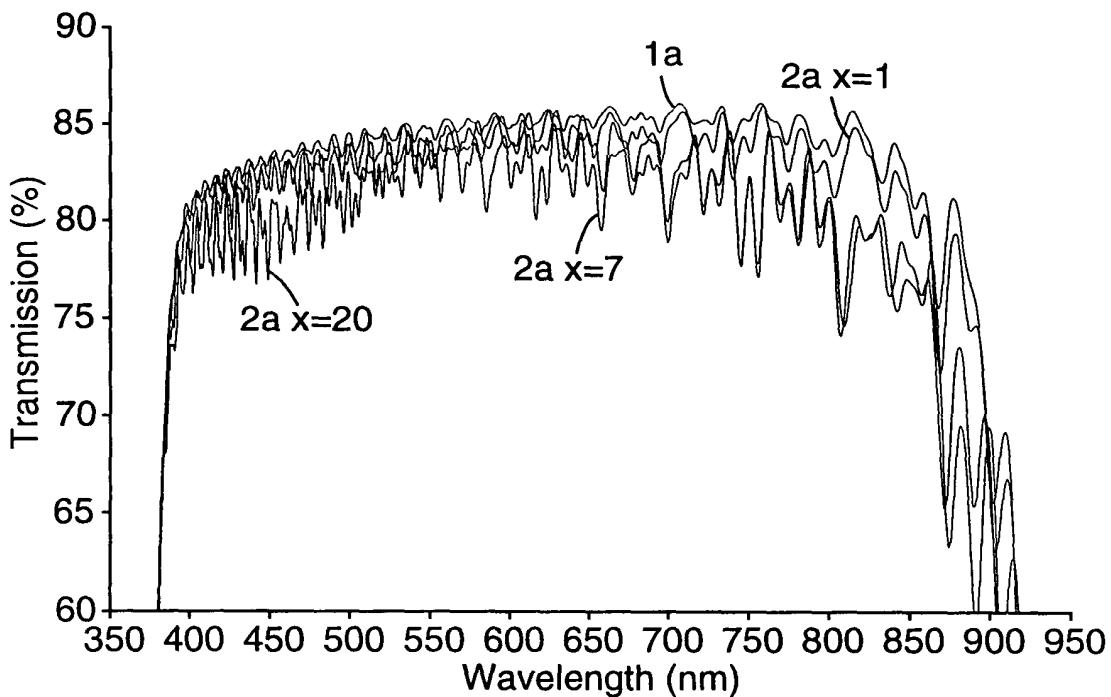


Fig. 15

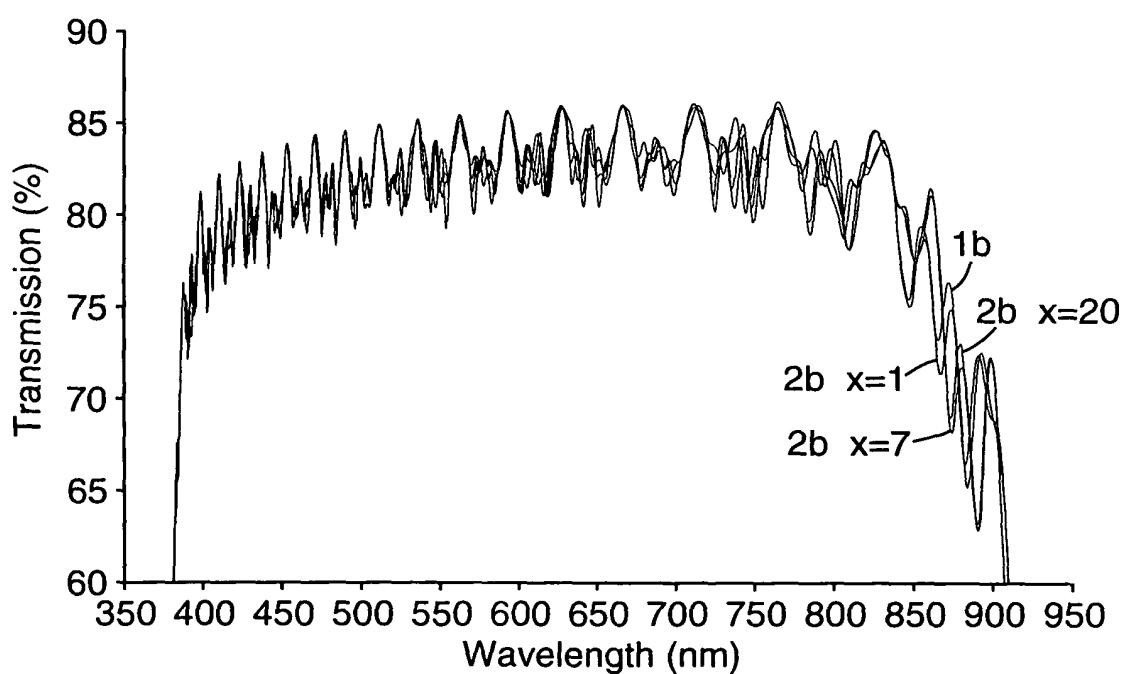


Fig. 16

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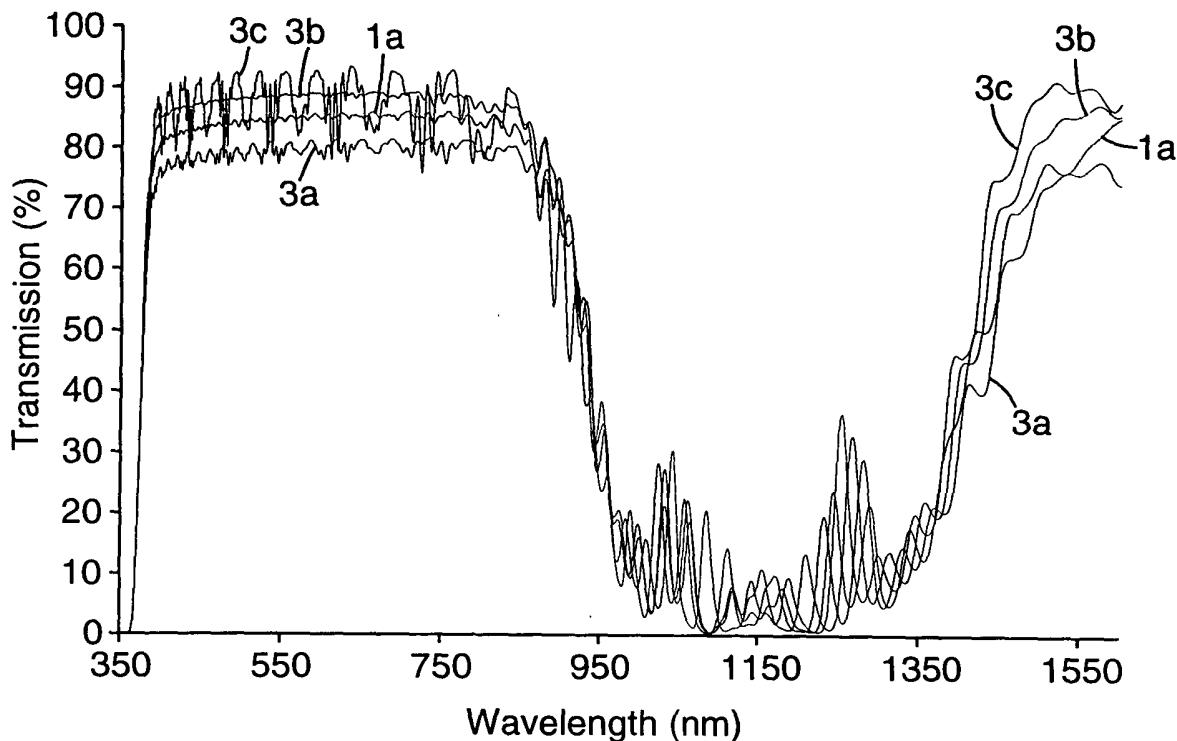


Fig. 17

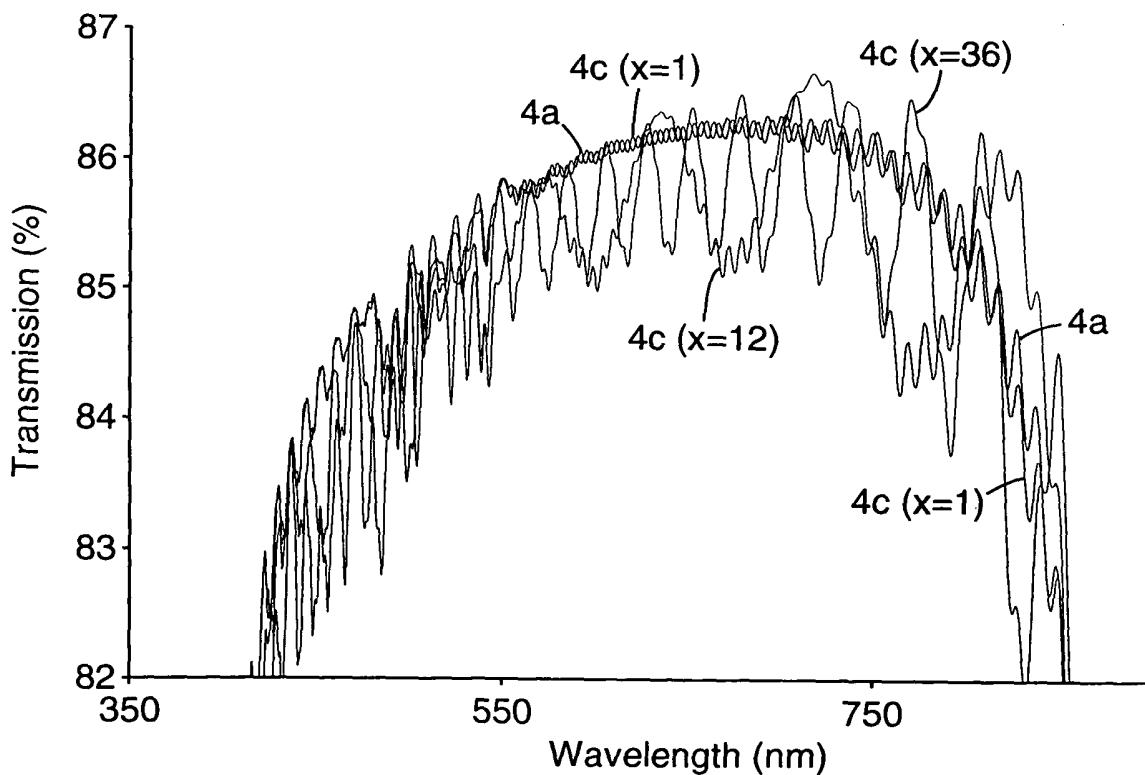
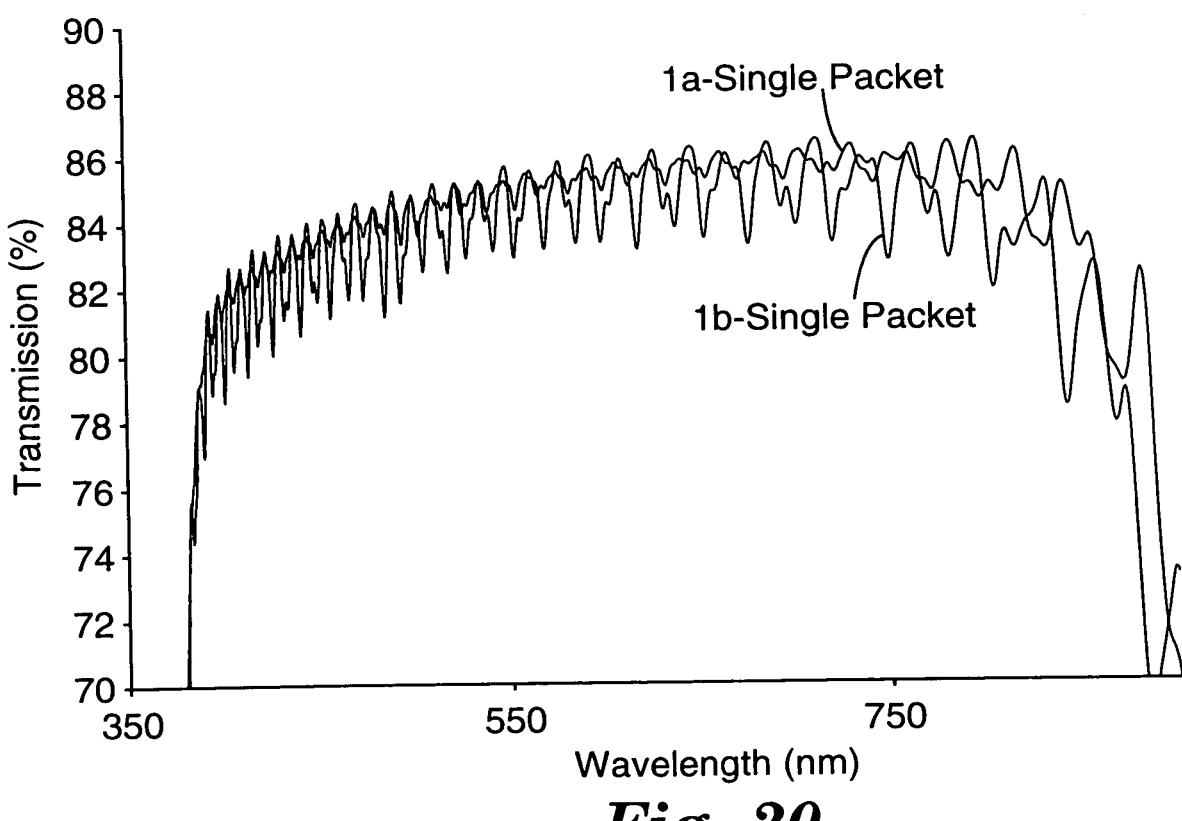
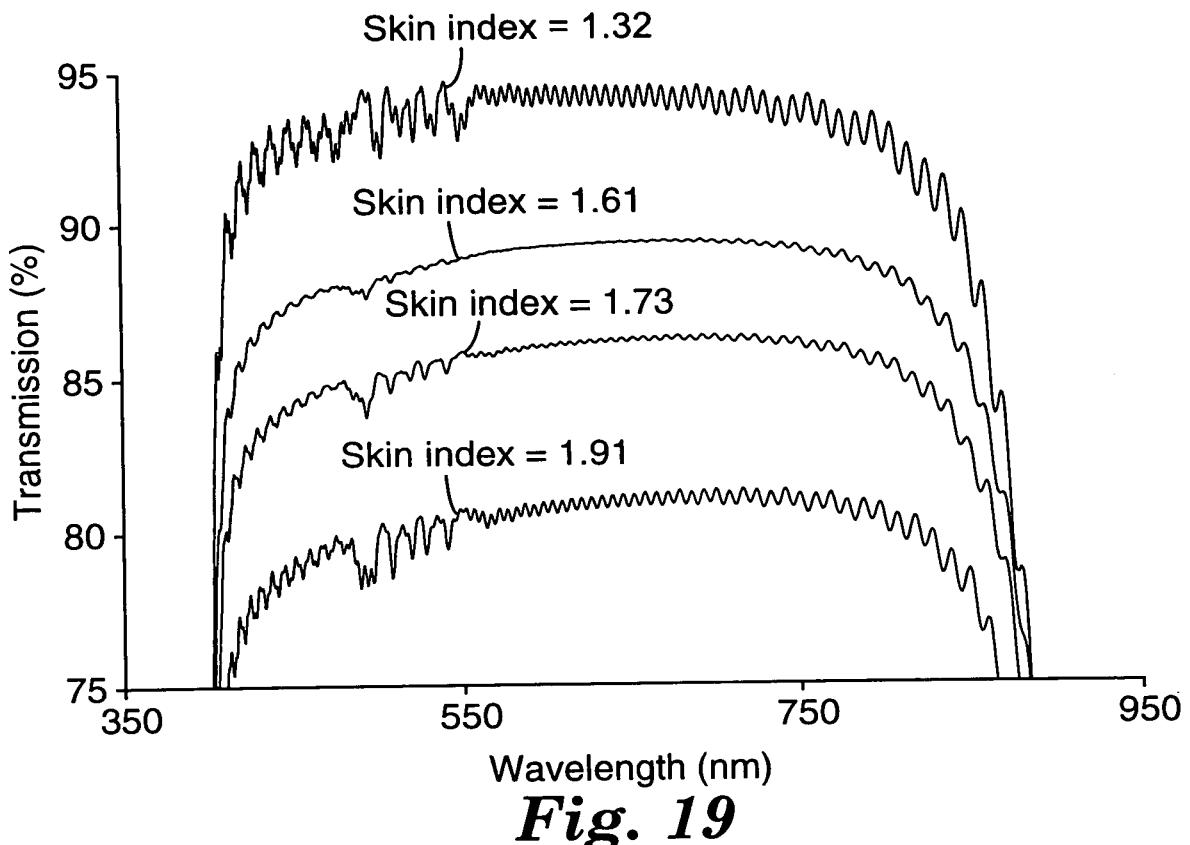


Fig. 18

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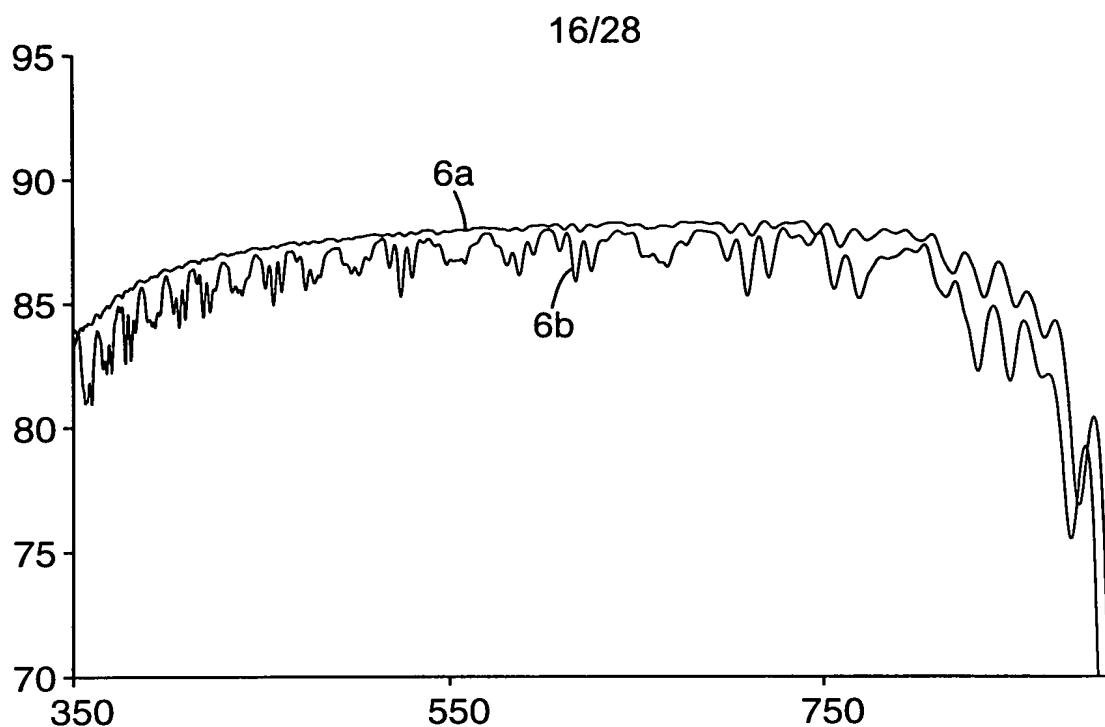


Fig. 21

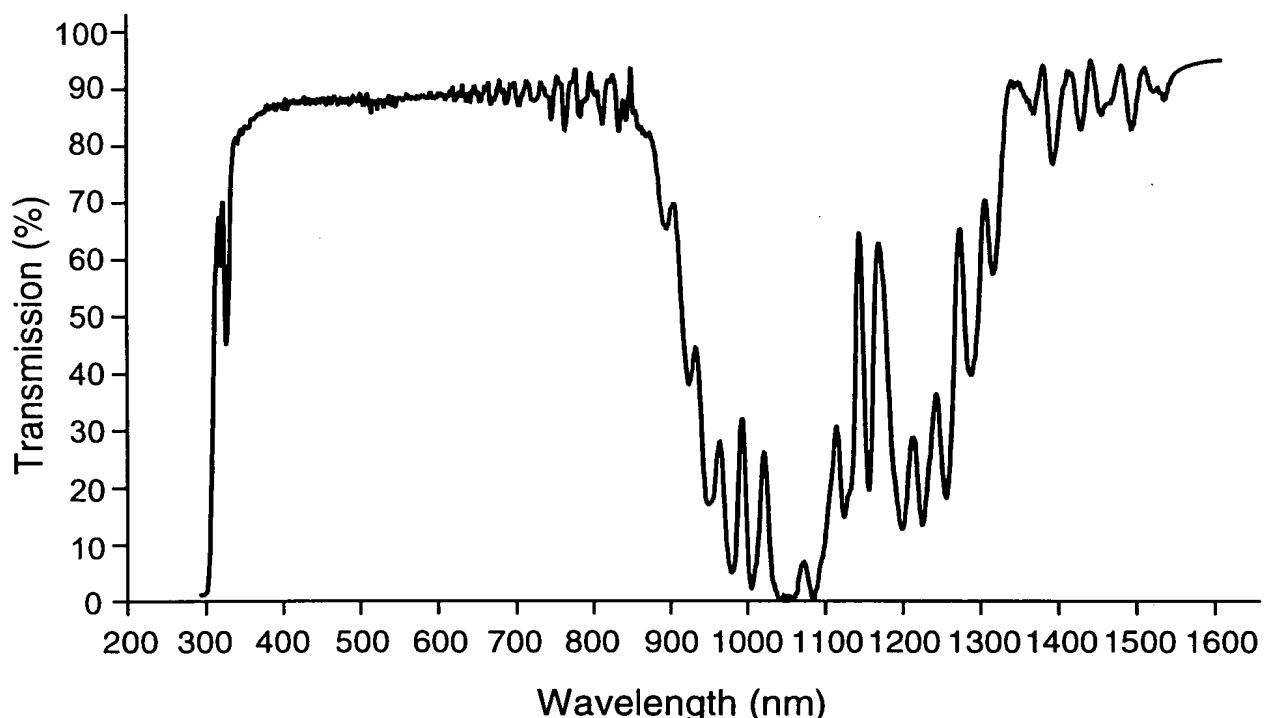


Fig. 22

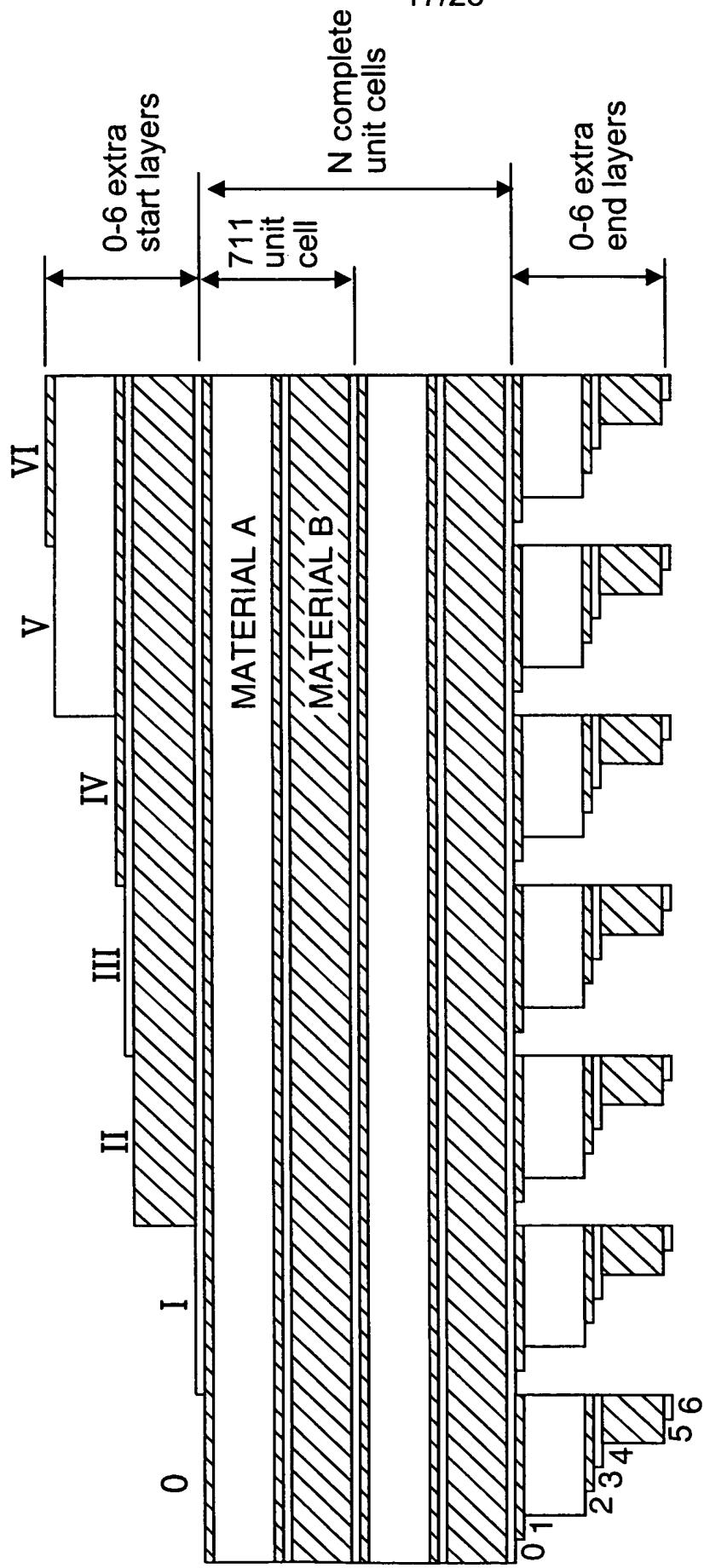


Fig. 23

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Therefrom

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	0	I	II	III	IV	V	VI
0	RVS +0	+1	+2	SYM +3	-2	-1	RVS +0
1	+1	RVS +2	+3	-2	SYM -1	+0	+1
2	+2	+3	RVS -2	-1	+0	SYM +1	+2
3	SYM +3	-2	-1	RVS +0	+1	+2	SYM +3
4	-2	SYM -1	+0	+1	RVS +2	+3	-2
5	-1	+0	SYM +1	+2	+3	RVS -2	-1
6	RVS +0	+1	+2	SYM +3	-2	-1	RVS +0

$n_{PBL/SKINS} \neq n_A \text{ OR } n_B$

Fig. 24a

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	0	I	II	III	IV	V	VI
0	-1	+1	+1	SYM +3	SYM +3	-1	-1
1	-1	+1	+1	SYM +3	SYM +3	-1	-1
2	SYM +1	+3	+3	-1	-1	SYM +1	SYM +1
3	SYM +1	+3	+3	-1	-1	SYM +1	SYM +1
4	+3	SYM -1	SYM -1	+1	+1	+3	+3
5	+3	SYM -1	SYM -1	+1	+1	+3	+3
6	-1	+1	+1	SYM +3	SYM +3	-1	-1

$$n_A > n_{PBL/SKINS} = n_B$$

Fig. 24b

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	0	I	II	III	IV	V	VI
0	-1	-1	SYM +1	SYM +1	+3	+3	-1
1	+1	+1	+3	+3	SYM -1	SYM -1	+1
2	+1	+1	+3	+3	SYM -1	SYM -1	+1
3	SYM +3	SYM +3	-1	-1	+1	+1	SYM +3
4	SYM +3	SYM +3	-1	-1	+1	+1	SYM +3
5	-1	-1	SYM +1	SYM +1	+3	+3	-1
6	-1	-1	SYM +1	SYM +1	+3	+3	-1

$$n_A = n_{PBL/SKINS} > n_B$$

Fig. 24c

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	0	I	II	III	IV	V	VI
0	6.51	5.86	5.72	6.30	6.80	6.43	6.05
1	6.98	6.26	6.13	6.80	7.21	6.97	6.49
2	6.67	6.07	5.91	6.43	6.97	6.82	6.16
3	6.26	5.66	5.51	6.05	6.49	6.16	5.84
4	5.66	5.37	5.26	5.45	6.77	5.62	5.24
5	5.51	5.26	5.15	5.31	5.71	5.48	5.10
6	6.05	5.45	5.31	5.85	6.28	5.96	5.67

$$n_{\text{SKIN/PBL}} = 1.0$$

Fig. 25a

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	0	I	II	III	IV	V	VI
0	7.18	6.25	7.35	9.03	9.25	8.09	6.96
1	8.25	6.95	7.42	9.25	9.46	8.89	7.90
2	8.60	7.18	6.67	8.09	8.89	9.71	9.02
3	8.62	6.82	6.14	6.96	7.90	9.02	8.76
4	6.82	5.45	4.90	6.16	6.91	7.54	7.11
5	6.14	4.90	5.49	7.04	7.46	6.79	6.08
6	6.96	6.16	7.04	8.67	8.92	7.82	6.79

$$n_{\text{SKIN/PBL}} = 1.425$$

Fig. 25b

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	0	I	II	III	IV	V	VI
0	4.48	3.67	5.59	7.04	6.78	5.39	4.29
1	5.66	4.34	5.22	6.78	7.18	6.32	5.48
2	7.40	5.69	4.17	5.39	6.32	7.21	7.25
3	7.39	5.88	3.54	4.29	5.48	7.25	7.54
4	5.88	4.31	2.17	3.55	4.11	5.53	5.90
5	3.54	2.17	4.42	5.94	5.33	3.99	3.45
6	4.29	3.55	5.94	7.28	7.11	5.55	4.20

$$n_{\text{SKIN/PBL}} = 1.5$$

Fig. 25c

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	0	I	II	III	IV	V	VI
0	3.02	2.68	5.75	7.13	6.28	4.07	2.78
1	4.25	2.70	4.75	6.28	6.26	4.87	3.96
2	6.37	4.72	2.61	4.07	4.87	6.00	6.07
3	7.08	5.54	2.59	2.78	3.96	6.07	6.45
4	5.54	4.39	1.86	2.52	2.62	4.46	5.29
5	2.59	1.86	4.28	5.48	4.82	2.56	2.46
6	2.78	2.52	5.48	7.02	6.50	4.09	2.73

$$n_{\text{SKIN/PBL}} = 1.5375$$

Fig. 25d

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	0	I	II	III	IV	V	VI
0	1.48	3.23	5.68	6.60	5.70	2.87	1.46
1	3.07	1.37	4.24	5.70	5.32	3.32	2.93
2	6.05	4.54	1.28	2.87	3.32	5.16	5.97
3	6.95	5.55	2.97	1.46	2.93	5.97	6.80
4	5.55	5.26	3.74	2.97	1.28	4.37	5.92
5	2.97	3.74	5.53	5.81	4.29	1.18	2.99
6	1.46	2.97	5.81	6.82	5.50	2.81	1.26

$$n_{\text{SKIN/PBL}} = 1.575$$

Fig. 25e

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	0	I	II	III	IV	V	VI
0	3.18	4.56	6.76	7.24	5.72	2.80	3.03
1	2.86	3.07	4.94	5.72	4.83	1.88	2.86
2	5.85	5.23	2.90	2.80	1.88	4.93	6.08
3	7.39	7.06	4.45	3.03	2.86	6.08	7.70
4	7.06	7.20	5.24	4.43	2.87	5.23	6.84
5	4.45	5.24	6.34	6.80	5.01	2.75	4.34
6	3.03	4.43	6.80	7.45	6.03	2.73	2.90

$$n_{\text{SKIN/PBL}} = 1.6125$$

Fig. 25f

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	0	I	II	III	IV	V	VI
0	5.07	6.36	8.41	8.31	6.49	4.10	4.75
1	4.16	4.88	6.53	6.49	4.80	2.50	4.06
2	6.08	6.04	4.67	4.10	2.50	4.81	6.54
3	8.02	7.77	6.19	4.75	4.06	6.54	8.30
4	7.77	8.29	7.11	6.22	4.69	6.03	8.10
5	6.19	7.11	8.13	7.77	5.82	4.57	6.18
6	4.75	6.22	7.77	8.16	6.33	3.94	4.70

$$n_{\text{SKIN/PBL}} = 1.65$$

Fig. 25g

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	0	I	II	III	IV	V	VI
0	8.78	10.29	10.84	10.70	8.68	7.44	8.51
1	7.61	8.49	9.00	8.68	6.70	6.12	7.40
2	8.87	9.53	8.31	7.44	6.12	6.67	8.75
3	10.85	11.25	9.81	8.51	7.40	8.75	10.84
4	11.25	12.19	10.93	9.72	8.35	8.95	11.07
5	9.81	10.93	11.85	11.07	9.25	8.29	9.90
6	8.51	9.72	11.07	10.80	8.73	7.24	8.39

$$n_{\text{SKIN/PBL}} = 1.725$$

Fig. 25h